NO. 84045-8

SUPREME COURT OF THE STATE OF WASHINGTON

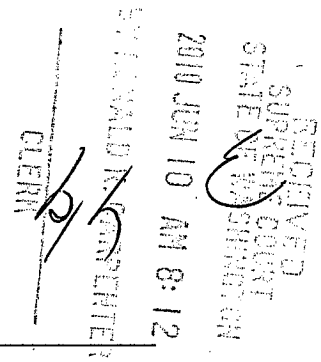
STATE OF WASHINGTON,

Respondent,

v.

SIONE P. LUI,

Petitioner.



STATE'S SUPPLEMENTAL BRIEF

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A. ISSUE PRESENTED

Whether expert scientific testimony that is based partly on test results obtained by non-testifying analysts comports with the Confrontation Clause, where the testifying expert is available for cross-examination about such things as testing procedures and quality assurance safeguards in the testing laboratory, and where the expert testifies to his or her own opinions and conclusions.

B. RELEVANT FACTS

The State charged Sione Lui with Murder in the Second Degree in the strangling death of his fiancée, Elaina Boussiacos. Shortly before her death, Boussiacos had told several people that she planned to leave Lui. Boussiacos spent the night before her disappearance alone with Lui in the apartment they shared. Police discovered her car a week later, in a parking lot less than a mile from her apartment; her body was in the trunk. CP 55-64. A jury convicted Lui as charged.[1] CP 19.

[1] The murder, the ensuing investigation, and the trial testimony are set out in detail in the Brief of Respondent (Court of Appeals) at 1-15.

The testimony of two of the State's expert witnesses is at issue here.[2] Dr. Richard Harruff, Chief Medical Examiner for King County, testified about the cause and manner of Boussiacos's death. Dr. Harruff appeared at trial in place of Kathy Raven, the pathologist who had done the autopsy, because Raven had relocated to Nevada and was testifying in another court. RP 1337, 1343. The autopsy report was not admitted into evidence at trial. RP 1368, 1372; Ex. 168 (Autopsy Report – "Identification Only").

Dr. Harruff testified about the protocols and procedures for conducting autopsies in the Medical Examiner's Office. RP 1334-36, 1348-57. While Dr. Harruff did not observe the autopsy itself, he contemporaneously reviewed Dr. Raven's report, discussed it with her, and co-signed it. RP 1338, 1340-41, 1343; Ex 168.

Dr. Harruff is an expert in strangulation injuries. RP 1385. Based primarily on photographs taken during the autopsy, Harruff gave his opinion on the cause and manner of Boussiacos's death. RP 1375-97, 1405. He also gave his expert opinion that it takes about four minutes to strangle a person to death. RP 1397.

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[2] The testimony of these experts is set out in greater detail in the Brief of Respondent (Court of Appeals) at 18-23 (Harruff) and 36-43 (Pineda).

Dr. Harruff related the internal temperature of Boussiacos's body at the time of discovery to the likely time of her death.[3] RP 1354-56, 1398-99. He also testified that, based on a report from the Toxicology Lab, neither drugs, alcohol nor nicotine was found in Elaina Boussiacos's blood.[4] RP 1398.

The other expert witness was Gina Pineda, associate director and technical leader of the lab where some of the DNA testing had been done. RP 1483-84. Pineda testified in place of several technicians and analysts who had done the testing. RP 1468-69, 1548-52. Pineda supervised the daily duties of the forensic department of her lab; she was responsible for maintaining standard operating procedures and quality control. RP 1484. She testified to the lab's accreditation, and she described quality control procedures and safeguards in great detail. RP 1491-96, 1506-09.

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[3] In testifying to the body temperature itself, Dr. Harruff relied on the findings of Dr. Raven. To the extent that this may violate the Confrontation Clause, any error was harmless beyond a reasonable doubt in light of the broad time frame given for death (February 2nd through 7th) based on that temperature. See State v. Lui, 153 Wn. App. 304, 309-10 n.3, 4, 320 n.15, 221 P.3d 948 (2009), review granted, 168 Wn.2d 1018 (2010).

[4] In testifying to the toxicology results, Dr. Harruff related the findings of a different analyst. To the extent that this may violate the Confrontation Clause, any error was harmless beyond a reasonable doubt. See Brief of Respondent (Court of Appeals) at 35; Lui, 153 Wn. App. at 320 n.15.

Pineda had done technical and administrative reviews on much of the DNA work done in this case. RP 1506.

Pineda said that every step in the process had to be documented, and she had reviewed all of the documentation to satisfy herself that the work had been done properly. RP1506-07. Pineda had not simply relied on the analysts' conclusions, but came to her own results. RP 1507. She explained that the data are reduced to electronic format, called an electropherogram. Id. Any expert can look at the peaks and valleys. Id. Pineda looked at the data and drew her own interpretations and conclusions. Id.

Pineda explained the DNA analysis, Y-STR, that was used on the evidence in this case. RP 1496-1505. Using a table of DNA results consisting of rows and columns of numbers, Pineda drew conclusions about the probabilities of various persons being the donors of the DNA at issue. RP 1514-20, 1532-47; Ex. 136 (attached as Appendix A).[5]

[5] Ex. 136 consists of four pages, the first three of which are teaching aids. The fourth page was the table of Y-STR results; this was the only page to which the defense objected. RP 1497. The exhibit was admitted for illustrative purposes only. RP 1497-98; Appendix A. No other written materials (e.g., lab reports or notes) were admitted through Pineda's testimony.

Both Harruff and Pineda were questioned by the defense about the fact that they had not personally conducted the tests upon which they relied in part for their conclusions and opinions. RP 1339-40, 1494-95, 1512-13, 1567. The defense objected to both experts on Confrontation Clause grounds; the trial court found that Lui's confrontation right was satisfied because he had the opportunity to cross-examine the witnesses. RP 1346-47, 1419-21.

The Court of Appeals affirmed, finding that Lui "had full opportunity to test the basis and reliability of the experts' opinions and conclusions 'in the crucible of cross-examination,'" and holding that his confrontation rights were not violated. State v. Lui, 153 Wn. App. 304, 325, 221 P.3d 948 (2009) (quoting Crawford v. Washington, 541 U.S. 36, 61, 124 S. Ct. 1354, 158 L. Ed. 2d 177 (2004)), review granted, 168 Wn.2d 1018 (2010).

C. ARGUMENT

In Melendez-Diaz v. Massachusetts, ___ U.S. ___, 129 S. Ct. 2527, 174 L. Ed. 2d 314 (2009), the Supreme Court addressed the application of its landmark decision in Crawford v. Washington, supra, to scientific evidence. The prosecution had

offered at trial sworn "certificates of analysis" showing the results of forensic testing; these certificates were admitted as prima facie evidence of the composition, quality and weight of the narcotics analyzed. Melendez-Diaz, 129 S. Ct. at 2530-31. The Supreme Court found that these affidavits were "testimonial," and held that their introduction at trial without accompanying witness testimony violated the Confrontation Clause. Id. at 2532.

Melendez-Diaz did not answer the question posed in this case: Whether the State may present the scientific opinions and conclusions of a testifying expert witness, when that testimony is based in part on results obtained by an analyst who does not appear at trial. This Court should hold that, where an expert witness testifies to his or her own opinions and conclusions, and where the testifying witness can be questioned concerning the tests that were done and the procedures and safeguards in use in the testing laboratory, the defendant's confrontation right is fully protected by the opportunity to cross-examine the testifying expert.

1. THE TESTIMONY OF THE STATE'S EXPERT WITNESSES DID NOT VIOLATE LUI'S RIGHTS UNDER THE CONFRONTATION CLAUSE.

a. Melendez-Diaz Does Not Preclude The Expert Testimony Offered In This Case.[6]

In the wake of the United States Supreme Court's opinion in Melendez-Diaz, a number of courts have addressed the limits imposed by the Confrontation Clause on expert scientific testimony. Most have concluded that, where an expert scientific witness testifies to his or her own conclusions, even though based in part on results obtained by a non-testifying analyst, such testimony does not offend the Confrontation Clause. By contrast, where the testifying expert functions as nothing more than a conduit for the findings and conclusions of a non-testifying analyst, courts have found a violation of the right of confrontation.

i. The North Carolina cases.

This distinction, and the differing results it generates, are well illustrated by a series of post-Melendez-Diaz cases from the appellate courts of North Carolina. In these cases, the courts

[6] While Melendez-Diaz did not decide the issue presented in this case, it clarified the Confrontation Clause analysis as it applies to scientific evidence. For this reason, this brief will focus on cases issued since Melendez-Diaz was filed. Previous case law, much of which remains relevant, is discussed at length in the Brief of Respondent (Court of Appeals).

carefully analyzed the expert testimony presented by the State to determine whether the testimony violated the Confrontation Clause.

Only two months after Melendez-Diaz was decided, the North Carolina Supreme Court, in State v. Locklear, 681 S.E.2d 293 (N.C. 2009), addressed the limits placed by the Confrontation Clause on the admission of forensic evidence through an expert witness who did not personally conduct the testing. In Locklear, the Chief Medical Examiner testified in place of the forensic pathologist who had performed the autopsy on one of the victims years earlier. Id. at 304. The autopsy report itself was admitted, and the expert witness related the cause of death "according to the autopsy report," as well as the results of a forensic dental analysis that was included in the report. Id. Relying on Melendez-Diaz, the court rejected the State's argument that the autopsy report was not testimonial, and found a confrontation violation. Id. at 304-05.

The Court of Appeals of North Carolina subsequently applied the reasoning of Melendez-Diaz and Locklear in several cases, finding expert testimony admissible in two of those cases. In State v. Mobley, 684 S.E.2d 508 (N.C. Ct. App. 2009), review denied, 692 S.E.2d 393 (2010), a DNA analyst testified regarding DNA

tests performed by other analysts.[7] Id. at 509. The testifying analyst "testified not just to the results of other experts' tests, but to her own technical review of these tests, her own expert opinion of the accuracy of the non-testifying experts' tests, and her own expert opinion based on a comparison of the original data." Id. at 511.

The Mobley court distinguished Locklear, noting that the expert witness in Locklear was "merely reporting" the results of others, and "did not testify to his own expert opinion based upon the tests performed by other experts, nor did he testify to any review of the conclusions of the underlying reports or of any independent comparison performed." Id. Because the witness in Mobley came to the conclusion that two DNA profiles were a match based upon her independent review of the results of the tests, the court found no Confrontation Clause violation. Id. at 511, 512.

In State v. Hough, 690 S.E.2d 285 (N.C. Ct. App. 2010), a forensic chemist testified to the content and weight of controlled substances that had been tested by a since-retired forensic chemist. Id. at 288. The testifying expert described the laboratory's chain of custody procedures and the specific tests employed in the

[7] While Mobley, like some of the other cases addressed in this brief, was a "plain error" case, thus affecting the standard of review, the courts in all of the cited cases squarely addressed the merits of the Confrontation Clause claim.

analyses. Id. at 290-91. She testified that she had completed a "peer review" of the other chemist's work. Id.

The court distinguished Melendez-Diaz, pointing out that in that case, a certificate of analysis, with no accompanying expert testimony, was offered as prima facie evidence of the composition, quality and weight of the narcotic the defendant was alleged to have possessed. 690 S.E.2d at 289, 291. The court also distinguished Locklear, observing that the medical examiner in that case did not testify to his own expert opinion, but rather "exclusively relayed the findings" of non-testifying experts. Id. at 289.

The court pointed out that, in contrast to Melendez-Diaz and Locklear, the expert witness in Hough "did not merely present the test results, or read verbatim from [the non-testifying analyst's] report; rather, she provided her own analysis and expert opinion regarding the accuracy of the reports based on her peer review." Id. at 291. The court held that this testimony did not violate the defendant's confrontation right.

The cases where the North Carolina courts found that there *was* a Confrontation Clause violation are consistent with this analysis. In State v. Galindo, 683 S.E.2d 785 (N.C. Ct. App. 2009), a supervising chemist testified in place of the analyst who had

identified and weighed the narcotics at issue. Id. at 787. While the witness testified to the chain of custody procedures and the calibration of the scale, and stated that the laboratory was properly accredited, his opinion as to the identity and weight of the substances was based "solely" on the lab report of the absent analyst. Id. The court concluded that "[t]he evidence in this case – [the chemist's] expert testimony based 'solely' on the absent analyst's lab report – is indistinguishable from the opinion testimony held to be unconstitutional in *Locklear*." Id. at 788. The court accordingly held that the defendant's right to confront an adverse witness was violated. Id.

In State v. Brennan, 692 S.E.2d 427 (N.C. Ct. App. 2010), the State offered evidence identifying a controlled substance through testimony of a forensic chemist "who had read the affidavit of the chemical analyst." Id. at 428. The testifying chemist said that she had reviewed the analyst's results and formed an opinion to a reasonable degree of scientific certainty that the substance in the pipe was cocaine base. Id. at 429. The witness saw the substance for the first time during her testimony. Id. at 430. The court found, based on her testimony, that the witness was "merely

reporting the results of other experts." Id. at 431. Citing Melendez-Diaz and Locklear, the court found a confrontation violation. Id.

Finally, in State v. Brewington, ___ S.E.2d ___, 2010 WL 1957477 (N.C. Ct. App. 2010), a forensic chemist testified in place of the analyst who conducted the testing of the alleged controlled substance. Id. at *1. The testifying expert said that she had reviewed both the testing procedures and the results, and "would have come to the same conclusion" as did the analyst. Id. at *2-*3. The court held that permitting the expert witness to testify to her opinion based "solely" on testing conducted by the non-testifying analyst was a violation of the Confrontation Clause. Id. at *3.

The Brewington court carefully analyzed the cases that came before, starting with Melendez-Diaz and moving from Locklear to Brennan. 2010 WL 1957477 at *3-*6. The court neatly summed up the proper approach, based on those cases:

> Here, the question of whether the Sixth Amendment rights of defendant were violated turns on whether [the testifying expert] offered an independent expert opinion as to the chemical composition of the State's evidence or whether she merely summarized the findings of [the analyst]. If [the testifying expert] simply offered the opinion contained in [the analyst's] report – the type of report that the Supreme Court held to be "testimonial" in *Melendez-Diaz* and that the North Carolina Supreme Court held to be inadmissible through a testifying expert in *Locklear* – then the

> defendant's right to confrontation was implicated and violated. *If, however, [the testifying expert] offered her own expert opinion based on independent analysis, then her use of the underlying report prepared by [the analyst] as a source of data facilitating that analysis would not violate defendant's right to confrontation.*

Id. at *7 (italics added).[8]

The North Carolina cases thus support a critical distinction: where the testifying expert witness does no more than repeat the findings and conclusions of an absent analyst, the Confrontation Clause is violated; but where the testifying expert draws his or her own independent conclusions and states his or her own opinions, based on data gathered by another, the defendant's ability to cross-examine the testifying witness preserves his right to confrontation.

ii. Other state and federal courts.[9]

The courts of other states, as well as federal courts, generally mirror North Carolina's analysis. The opinion in Wood v.

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[8] The Brewington court also pointed out what may be a significant distinction between an expert witness testifying about DNA and one testifying about controlled substances: "Unlike an analysis of DNA data, there is no opportunity for a meaningful cross-examination of testimony concerning the results of a drug test . . . ." 2010 WL 1957477 at *11.

[9] Cases from California, including People v. Rutterschmidt, 98 Cal. Rptr.3d 390, review granted and opinion superseded, 102 Cal. Rptr.3d 281 (2009), have not been included. The California Supreme Court granted review in Rutterschmidt and in several other cases addressing the issue raised in this case. Under Cal. Rule of Court 8.1105, such opinions are no longer considered published.

State, 299 S.W.3d 200 (Tex. App. 2009), is particularly helpful in that it explicitly differentiates between evidence that may properly be admitted through the expert witness, and evidence that likely violates the Confrontation Clause. In Wood, the chief medical examiner, who had not been present at the autopsy of the victim, testified in place of the pathologist who did the autopsy. Id. at 207. The court found that, in light of Melendez-Diaz, the autopsy report was testimonial; the court found no problem in Wood, however, because the report itself was not admitted in evidence. Id. at 210.

As to the expert's testimony, the court in Wood held that "the Confrontation Clause was not offended when [the testifying expert] testified to his own opinions regarding the nature and causes of [the victim's] injuries and death, even though those opinions were based in part on [the testifying witness's] review of [the pathologist's] autopsy report." Id. at 213. The testifying expert went beyond his own opinions, however, in responding to questions directed explicitly to what was recorded in the report (e.g., "[W]hat's recorded in the report specifically with respect to head injuries?"). Id. at 210-11. The court found that the answers to such questions violated the Confrontation Clause. Id. at 213.

The court in Commonwealth v. Avila, 912 N.E.2d 1014 (Mass. 2009), drew a similar distinction. Again, the Chief Medical Examiner stepped in for the pathologist who did the autopsy. Id. at 1027. The defendant did not dispute the admissibility of the testifying witness's opinions with respect to cause and mechanism of death, and the length of time it might have taken the victim to die; he objected, however, to the witness's recitation of the findings and conclusions of the absent medical examiner. Id. Analyzing the issue in light of Melendez-Diaz, the court held that the trial judge properly allowed the testifying expert "to offer his opinions concerning issues related to the autopsy" (including opinions based on photographs), but that "allowing [the testifying expert] to testify on direct examination about the findings in [the] autopsy report" violated the Confrontation Clause.[10] Id. at 1029-30, 1030 n.19.

Perhaps the most succinct description of this constitutional dichotomy may be found in Vann v. State, 229 P.3d 197 (Alaska Ct. App. 2010).[11] In Vann, a DNA analyst testified in part based on

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[10] The court quoted authority suggesting that, should the defendant inquire on cross-examination about the basis for the expert's testimony, such evidence could properly be admitted. 912 N.E.2d at 1029 n.18; see ER 705.

[11] Vann also contains a useful discussion of current cases as they fit into this paradigm. 229 P.3d at 206-07.

results obtained by another analyst in the same laboratory. Id. at 199. Finding no Confrontation Clause violation, the court explained: "The critical point [in our confrontation clause analysis] is the distinction between an expert who [offers] an opinion based in part on the work of others and an expert who merely summarizes the work of others . . . . [O]ne expert cannot act as a mere conduit for the opinion of another." Id. at 199, 205-06 (quoting State v. Lonsby, 707 N.W.2d 610 (Mich. Ct. App. 2005)).

In State v. Smith, 28 So.3d 838 (Fla. 2009), another DNA case, the State presented the testimony of a supervisor in place of the analysts who conducted the tests. Id. at 853. The supervisor explained that she had relied on notes kept by the analysts to reach her conclusions and prepare the final report. Id. She testified that she compared the DNA samples from the evidence with the defendant's DNA to determine whether the specimens matched at relevant locations on the DNA strand, and she calculated the probabilities of a random match. Id. at 853-54.

The Smith court rejected the defendant's argument that the Confrontation Clause mandated the opportunity to cross-examine the analysts who did the testing; the supervisor had formulated her own conclusions from the raw data produced by the analysts, and

she was subject to cross-examination. Id. at 853, 855. The court distinguished Melendez-Diaz on the basis that the expert in Smith "*actually testified during trial.*" Id. at 855 n.12 (italics in original).

In United States v. Boyd, 686 F. Supp.2d 382 (S.D.N.Y. 2010), a DNA expert based his conclusions in part on results of preliminary tests performed by others. Id. at 383. The expert testified about the procedures involved in the testing, the safeguards and internal controls in place in the lab, and the technical review at the conclusion of the process. Id. at 385.

The federal district court succinctly framed the question left open by Melendez-Diaz: "[I]f (as here) the expert witness who takes the stand made the final determination as to the DNA match, and in so doing, relied on the results of tests performed by other members of the lab, does the failure to call the analysts who conducted the preliminary tests infringe the defendant's right under the Confrontation Clause?" Boyd, at 383. In reaching its answer, the court observed that, while a defendant is entitled to a "reasonable opportunity" for cross-examination, "[t]hat opportunity

cannot be boundless."[12] Id. at 384. The court concluded that the defendant's right to confrontation was preserved. Id. at 385.

In Pendergrass v. State, 913 N.E.2d 703 (Ind. 2009),[13] a DNA laboratory supervisor testified based on results obtained by a different analyst. Id. at 704. Two exhibits were admitted during the expert's testimony: a "Certificate of Analysis," containing an evidence inventory and a list of tests performed, but no test results or conclusions; and a table of test results comprised of numbers in columns, but again no conclusions. Id. In her role as supervisor, the expert conducted technical and administrative reviews of the work of analysts in her lab; she also testified about the procedures followed in the lab, and the steps taken to develop DNA profiles. Id. at 704-05. While the expert relied in part on the analyst's notes, the notes themselves were not admitted into evidence. Id. at 705. Finding no Confrontation Clause violation, the court observed: "If

[12] See Delaware v. Fensterer, 474 U.S. 15, 20, 106 S. Ct. 292, 88 L. Ed. 2d 15 (1985) ("Generally speaking, the Confrontation Clause guarantees an *opportunity* for effective cross-examination, not cross-examination that is effective in whatever way, and to whatever extent, the defense might wish.") (italics in original).

[13] A petition for certiorari is pending in the United States Supreme Court (No. 09-866).

the chief mechanism for ensuring reliability of evidence is to be cross-examination, Pendergrass had that here."[14] Id. at 708.

Cases in which courts *have* found a Confrontation Clause violation based on expert scientific testimony generally do not contradict this analysis -- the problem is most often that a testimonial report prepared by a different analyst was admitted into evidence along with the expert's testimony. E.g., People v. Payne, 774 N.W.2d 714 (Mich. Ct. App. 2009); State v. Aragon, 225 P.3d 1280 (N.M. 2010); Koenig v. State, 916 N.E.2d 200 (Ind. Ct. App. 2009). Cf. Carolina v. State, 690 S.E.2d 435, 437 (Ga. Ct. App. 2010) (finding "critical distinction" in fact that report prepared by non-testifying expert was *not* admitted into evidence).

Lui placed considerable weight in his briefing below on the United States Supreme Court's treatment of State v. Crager, 879 N.E.2d 745 (Ohio 2007), a case where the Supreme Court of Ohio found no confrontation violation when DNA evidence was admitted through an expert who had not performed the testing.[15]

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[14] The Confrontation Clause requires that reliability be tested "in the crucible of cross-examination." Melendez-Diaz, 129 S. Ct. at 2536 (quoting Crawford, 541 U.S. at 61).

[15] Appellant's Reply Brief (Court of Appeals) at 6-9. See State's reliance on Crager in the Brief of Respondent (Court of Appeals) at 46-48.

Id. at 758. Just days after issuing its opinion in Melendez-Diaz, the Court granted certiorari, vacated the judgment, and remanded for further consideration in light of Melendez-Diaz. Crager v. Ohio, 129 S. Ct. 2856 (June 29, 2009). Lui argued that "[b]y noting that its decision in Melendez-Diaz undermined the reasoning in Crager, the U.S. Supreme Court necessarily rejected the reasoning in this case as well." Appellant's Reply Brief (Court of Appeals) at 9.

Lui misses an important distinction. The focus in Crager was on whether the DNA reports themselves were "testimonial." Crager, 879 N.E.2d at 750-51. Concluding that the DNA reports were business records, the court held that "records of scientific tests are not 'testimonial' under *Crawford*." Id. at 751, 758. Because this holding is in direct conflict with Melendez-Diaz, where the Court held that the certificates of analysis of controlled substances admitted at trial *were* testimonial (129 S. Ct. at 2532), it is not surprising that the Supreme Court directed the Ohio court to rethink its holding. See State v. Lopez, ___ N.E.2d ___, 2010 WL 703250 (Ohio Ct. App. 2010) at *9-*10 (as Melendez-Diaz invalidated the principle at the core of Crager, vacation of the entire decision is understandable); United States v. Darden, 656 F.

Supp.2d 560, 563-64 (D. Md. 2009) (declining to draw inference from Supreme Court's action in Crager).

Wherever the precise line lies between constitutionally admissible expert scientific testimony and testimony that violates the Confrontation Clause, Lui's case falls on the constitutional side. Both experts supervised the labs in which the respective tests were done, and both were available for meaningful cross-examination on the nature of the tests, the standard operating procedures of the labs, and the quality control safeguards in place. Both had reviewed the reports done by the analysts. In neither case were those reports admitted into evidence.

Most importantly, the experts in Lui's case did not serve as "mere conduits" for the findings and conclusions of absent witnesses. Dr. Harruff, an expert on strangulation, used photographs of the victim's body to explain the manner and cause of her death. Gina Pineda, an experienced DNA analyst and supervisor, used the results of electrophoresis to explain to the jury what could be deduced as to the source of DNA detected on various items of evidence. Lui had a full and fair opportunity to cross-examine these witnesses on their general knowledge of the labs they supervised, as well as on their own conclusions and

opinions rendered in this case. Under these circumstances, there was no violation of the right to confrontation.

b. The Evidence Relied Upon By The Expert Witnesses In Forming Their Opinions Was Not In Itself Testimonial.

Unlike the affidavits in Melendez-Diaz, which stated the conclusion that the substance recovered from the defendant was cocaine, raw data of the type introduced in Lui's case and relied on by the testifying experts is not "testimonial." Tables made up of rows and columns of numbers (e.g., Ex. 136), or charts showing peaks resulting from electrophoresis, mean nothing without interpretation and explication by an expert. The same is true for photographs of injuries, whose possible cause and likely effect must be explained by an expert. Such raw data make no "statement" in and of themselves; the only "statement" comes from the testifying expert.

Several courts have explicitly recognized this distinction between raw data and the conclusions that may be drawn therefrom. See State v. Appleby, 221 P.3d 525, 551 (Kan. 2009) (population frequency data and statistical programs used to make the data meaningful are not testimonial); People v. Brown, 918

N.E.2d 927 (N.Y. 2009) (report consisting of machine-generated graphs, charts and numerical data not testimonial).

Other courts have relied on the principle that the data are not offered for the truth, but as a basis for the expert's opinion. See People v. Johnson, 915 N.E.2d 845 (Ill. App. Ct. 2009) (DNA profile prepared by non-testifying analyst was not testimonial because it was not offered for its truth, but as the basis for the testifying expert's opinion); People v. Lovejoy, 919 N.E.2d 843 (Ill. 2009) (results of toxicology testing done by non-testifying analyst did not implicate Crawford because not admitted for truth but only to show steps testifying expert took prior to rendering his opinion).

Justice Thomas's concurring opinion in Melendez-Diaz is instructive. Thomas, who provided the fifth vote for the majority in that 5-4 decision, wrote separately to emphasize that he "continue[s] to adhere to [his] position that 'the Confrontation Clause is implicated by extrajudicial statements only insofar as they are contained in formalized testimonial materials, such as affidavits, depositions, prior testimony, or confessions.'" Melendez-Diaz, 129 S. Ct. at 2543 (Thomas, J., concurring) (quoting White v. Illinois, 502 U.S. 346, 365, 112 S. Ct. 736, 116 L. Ed. 2d 848 (1992) (opinion concurring in part and concurring in judgment)). See Lui,

153 Wn. App. at 317 n.11. The sworn affidavits in Melendez-Diaz plainly qualified as testimonial under this definition; just as plainly, raw data derived from electrophoresis and photos taken during an autopsy do not.

c. Lui Was Able To Fully Confront The Expert Witnesses.

The Confrontation Clause requires that the reliability of evidence be tested in "the crucible of cross-examination." Melendez-Diaz, 129 S. Ct. at 2536 (quoting Crawford, 541 U.S. at 61). The Court in Melendez-Diaz rejected the notion that forensic evidence was inherently reliable. 129 S. Ct. at 2536. Elaborating on its concern with the "bare-bones" affidavit attesting to cocaine admitted in Melendez-Diaz, the Court pointed out: "At the time of trial, petitioner did not know what tests the analysts performed, whether those tests were routine, and whether interpreting their results required the exercise of judgment or the use of skills that the analysts may not have possessed." Id. at 2537.

Several cases have specifically addressed this problem. In Lopez, 2010 WL 703250, a forensic scientist testified regarding DNA results obtained by non-testifying analysts; the expert testified about "the procedures, process, logistics, and results of the DNA

testing offered as evidence against Lopez." Id. at *7, *12. Addressing the Melendez-Diaz Court's concern that test results might be manipulated or procedures executed badly, the court concluded that, through cross-examination of the expert, Lopez had a constitutionally sufficient chance to challenge the way the tests were done and whether the results were reliable. Id. at *12.

Recognizing the same concerns, the court in Vann held that, through cross-examination of the testifying expert, the defendant "had a fair opportunity to explore the type of testing that was performed and the procedures that were used in that testing." 229 P.3d at 208, 210. Moreover, the defendant had "the opportunity to identify or highlight any potential sources of error in the testing and any potential for misinterpretation of the test results." Id. at 210.

Moreover, the fact that the testifying expert did not personally do the testing is not lost on the jury, which can weigh this fact as it sees fit. See Vann, 229 P.3d at 211 (State's failure to produce lab analyst might affect weight or credibility of expert's testimony, but does not bar its admission); Lopez, 2010 WL 703250 at *12 ("Through the testimony, the jury was well aware that [the expert] had not performed the original testing on the samples and could therefore choose to assign whatever weight it chose to the

evidence . . . . "); Delaware v. Fensterer, 474 U.S. 15, 22, 106 S. Ct. 292, 88 L. Ed. 2d 15 (1985) (Confrontation Clause is generally satisfied when defendant has full and fair opportunity to expose infirmities through cross-examination, thereby calling attention to reasons for giving scant weight to witness's testimony).

In addition, the defendant always has the ability to call *additional* witnesses should he wish to. But absent any reason to believe that there was error or falsification, this is not constitutionally required. See Boyd, 686 F. Supp.2d at 384, 385 n.5. While the Court in Melendez-Diaz declined to *replace* the right of confrontation with the right of compulsory process, 129 S. Ct. at 2540, it is reasonable to expect the defendant to use his right of compulsory process to *augment* his confrontation right.

d. Melendez-Diaz Did Not Abrogate ER 703.

The Rules of Evidence make special provision for data on which experts rely in reaching their conclusions and forming their opinions:

> The facts or data in the particular case upon which an expert bases an opinion or inference may be those perceived by or made known to the expert at or before the hearing. If of a type reasonably relied upon by experts in the particular field in forming

> opinions or inferences upon the subject, the facts or data need not be admissible in evidence.

ER 703.

Several courts have directly addressed whether, or how, the Confrontation Clause limits the admissibility of evidence under ER 703. These courts have concluded that the evidence rule survives Crawford and Melendez-Diaz.

In Vann, the defendant argued that it was irrelevant whether the expert testimony admitted at trial was authorized by ER 703; the Confrontation Clause, he claimed, trumped the evidence rule. 229 P.3d at 202. The court first observed that Melendez-Diaz did not resolve the scope of the confrontation right when the State relies on expert scientific *testimony*. Vann, 229 P.3d at 203-04. "The question posed in this appeal is whether, under *Melendez-Diaz*, the Sixth Amendment right of confrontation limits the scope of expert testimony otherwise authorized by Evidence Rule 703 when this type of evidence is introduced by the government against the defendant in a criminal case." Id. at 205.

After a detailed survey of relevant cases, the court concluded that, even in the wake of Melendez-Diaz, an expert could still rely on data obtained by a different analyst, so long as

the testifying expert was not simply a conduit for the absent analyst's results or analysis but offered her own analysis, even though based partly on data obtained by another. Id. at 205-12. The court found no confrontation violation. Id. at 210.

Accord Wood, 299 S.W.2d at 212-14 (discussing interaction between ER 703 and ER 705); Pendergrass, 913 N.E.2d at 708-09 (noting that sources upon which expert relied might have been subject to a limiting instruction about the purpose for which they were admitted); Lui, 153 Wn. App. at 321-23, (experts' testimony permitted under both the rules of evidence and the Confrontation Clause, subject to a limiting instruction if requested).

2. ANY ERROR WAS HARMLESS.

Even if parts of Dr. Harruff's or Gina Pineda's testimony were admitted in violation of Lui's confrontation right, any error was harmless beyond a reasonable doubt.[16] The question was not *how* Elaina Boussiacos died, but *who* killed her. See Lui, 153 Wn. App. at 308 n.2, 309-10 n.3,4, 320 n.15. And even though the DNA evidence showed that Lui had touched Boussiacos's shoelaces and

[16] Violations of the Confrontation Clause may be harmless. Delaware v. Van Arsdall, 475 U.S. 673, 684, 106 S. Ct. 1431, 89 L. Ed. 2d 674 (1986). The test to determine whether a constitutional error is harmless is "whether it appears beyond a reasonable doubt that the error complained of did not contribute to the verdict obtained." State v. Banks, 149 Wn.2d 38, 44, 65 P.3d 1198 (2003).

that he had had sex with his fiancée more recently than he would admit, the State's case against Lui centered on his motive to kill her, and on his unique opportunity to do so. See Lui, at 320 n.15; Brief of Respondent (Court of Appeals) at 33-36, 50-51.

D. CONCLUSION

For all the foregoing reasons, this Court should affirm the Court of Appeals' decision affirming Lui's conviction.

DATED this 8th day of June, 2010.

Respectfully submitted,

DANIEL T. SATTERBERG
King County Prosecuting Attorney

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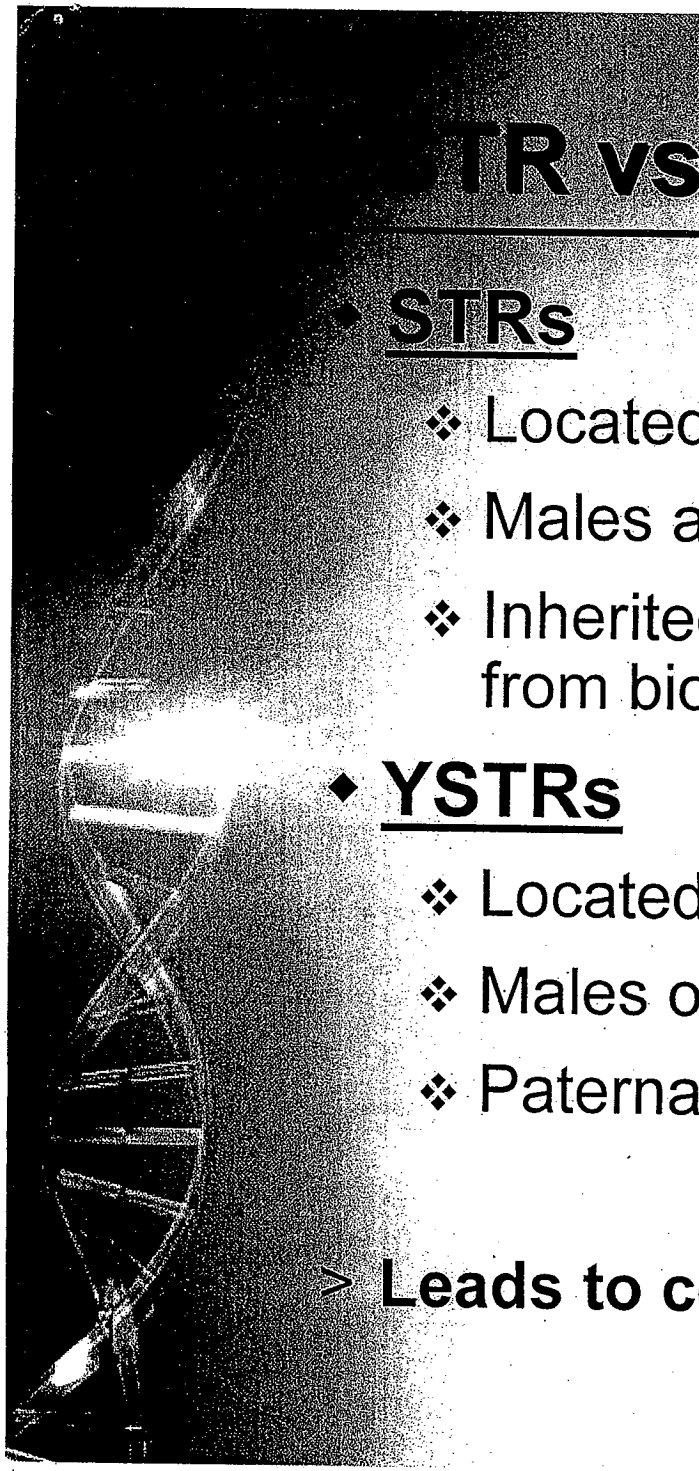
DEBORAH A. DWYER, WSBA #18887
Senior Deputy Prosecuting Attorney
Attorneys for Respondent
Office WSBA #91002

APPENDIX A

STATE EXHIBIT 1-26

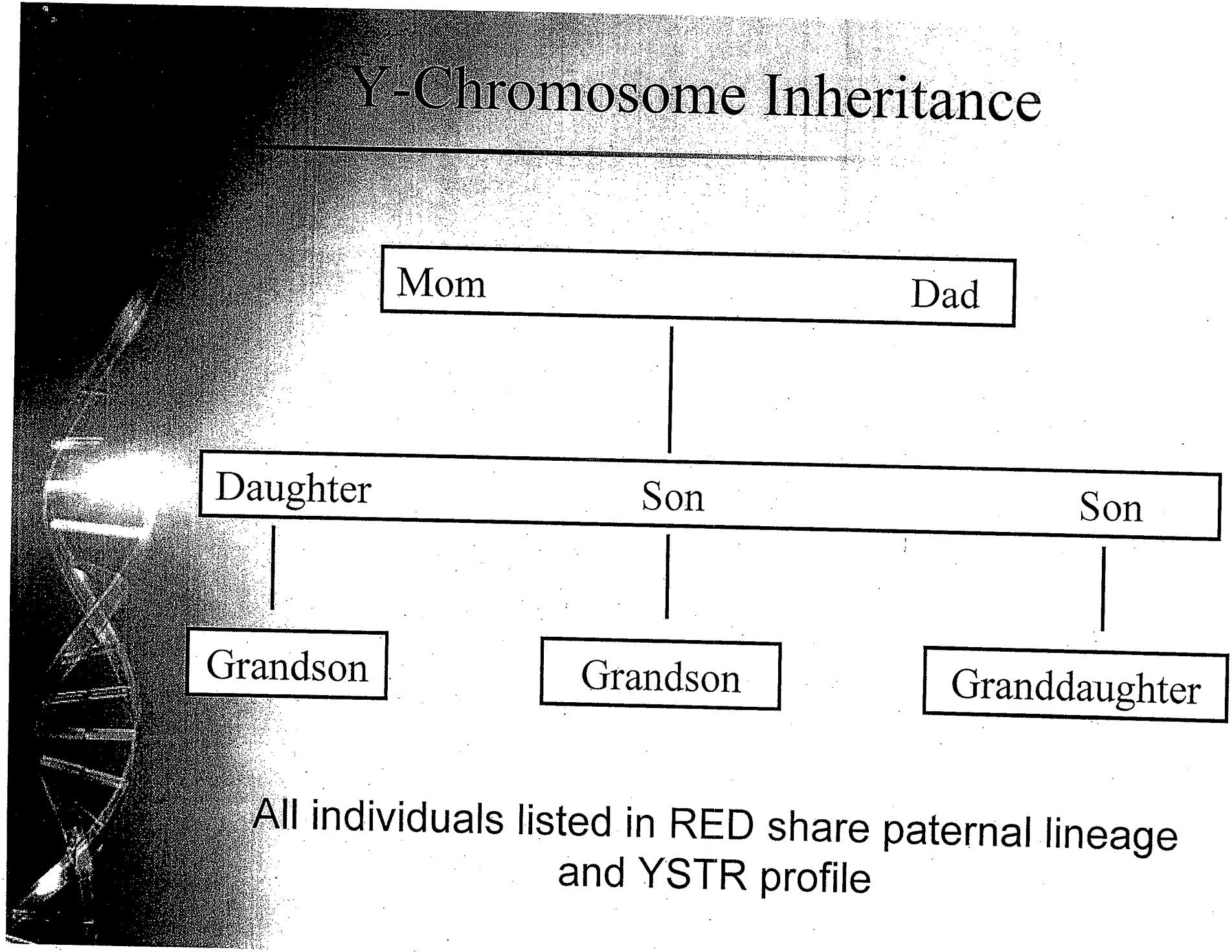


STR vs. Y-STR Analysis

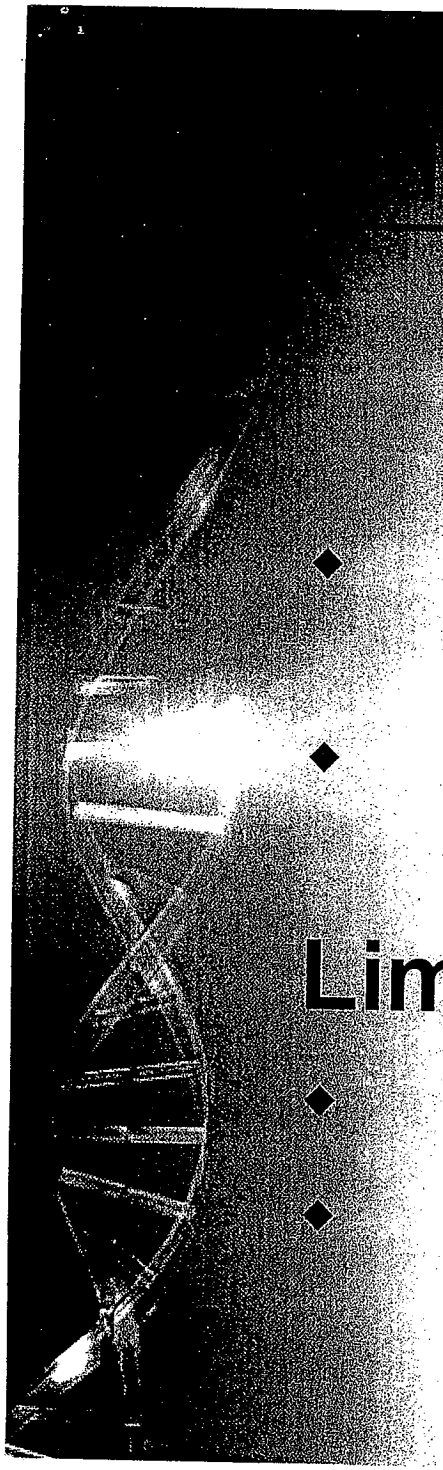
- **STRs**
  - Located on autosomal chromosomes
  - Males and females
  - Inherited half from biological mom and half from biological dad
- **YSTRs**
  - Located on Y chromosome
  - Males only
  - Paternal Inheritance only

> **Leads to certain advantages and limitations**

Y-Chromosome Inheritance



All individuals listed in RED share paternal lineage and YSTR profile



Advantages of Y-STRs:

- Male profile can be obtained from a mixture sample containing Male & excess Female DNA.
- Number of male contributors can be easily determined.
- Technical simplicity due to single allele profile.

Limitations of Y-STRs:

- Statistics
- Cannot differentiate between individuals sharing same paternal lineage.

YSTR DNA RESULTS

	#06-00981* Cuttings from left shoe laces	#06-00982* Cuttings from right shoe laces	#06-02033 Buccal swabs of Enoch Lui	#06-02034 Buccal swabs of James Anthony Negron	#06-00983 Blood of possible suspect, Sione Lui	#RG08-0002-01.01.1-SF Vaginal wash sperm fraction
DYS 456	16,[15]	16	16	16	16	16
DYS 389I	12,13	12,[13,14]	12	13	12	NR
DYS 390	23	NR	23	24	23	NR
DYS 389II	NR	NR	28	29	28	NR
DYS 458	16,[15,17]	16,[15,17,18]	16	17	16	16
DYS 19	NR	NR	14	14	14	14
DYS 385 a/b	14	NR	14,15	11	14,15	14
DYS 393	13,14	12,13,14	14	13	14	NR
DYS 391	10,[11,12]	10,[9,11]	10	11	10	10
DYS 439	NR	NR	11	13	11	11
DYS 635	21	21	21	21	21	NR
DYS 392	NR	NR	12	13	12	12
GATA H4	11	NR	11	12	11	11
DYS 437	15,16	14,16,[15]	16	15	16	NR
DYS 438	NR	NR	10	12	10	10
DYS 448	NR	21	21	19	21	21

STATE EXHIBIT 136

07-1-04039-7 SEA
State of Washington
v.
Sione Lui

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KING COUNTY, WASHINGTON

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Certificate of Service by Mail

Today I deposited in the mail of the United States of America, postage prepaid, a properly stamped and addressed envelope directed to **David B. Zuckerman**, the attorney for the petitioner, at 1300 Hoge Building, 705 Second Avenue, Seattle, WA 98104, containing a copy of the **State's Supplemental Brief** in **STATE V. SIONE LUI**, Cause No. **84045-8**, in the Supreme Court of the State of Washington .

I certify under penalty of perjury of the laws of the State of Washington that the foregoing is true and correct.

Name _____ Date 06/09/10

Done in Seattle, Washington